California

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William (Bill) J. Lyons, Jr.
Secretary

Details of the Pricing Formulas, Class 1 *(Part 4 of 4)*

by Dr. Eric Erba, Sr. Agricultural Economist

In the three previous issues of the California Dairy Review, we explained the details of pricing formulas for all of the other classes of milk. In this final article on California milk pricing, we will explain the Class 1 pricing formula and demonstrate how it differs from the other four pricing formulas that have been discussed.

California milk production has increased an average of 4.5% per year for the last 30 years. However, the increased milk marketings have not been uniformly allocated across all five classes of milk. Most of the increased milk production has gone into Classes 4a and 4b. Whereas these two classes accounted for less than 20% in 1970, they now account for over 70% of the milk produced. The total pounds of milk processed as Class 1 has remained remarkably stable over the past 30 years, but on a percentage of all milk produced, Class 1 utilization has fallen from 65% to less than 20%.

The Class 1 price shares many characteristics with the other four class prices. For example, Class 1 prices are announced once per month, individual milk components such as fat and solids–not–fat (SNF) are priced and the pricing formula references both national and California–based dairy product commodity prices. However, some elements of the Class 1 pricing formula are unique. First, the Class 1 price uses data from the 26th of the second prior month to the 10th of the prior month, whereas the other pricing formulas use the price data available from the 26th through the 25th. Simply put, the Class 1 pricing formula uses only part of the price information available, while the other pricing formulas use all of the price data available. Second, recall that the Class 4a and Class 4b prices are calculated retroactively, meaning that the prices are calculated "after–the–fact". We also explained that Classes 2 and 3 are priced forward, i.e., the minimum prices are announced in advance of when they actually apply. Class 1 prices are also announced in advance of when they actually apply, but they are announced mid–month, rather than at the end of the month. To illustrate the timing of the price announcement and the data that are used, Class 1 prices for July are announced by June 10th and use commodity price data from the May 26th through June 10th.

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May Milk Production

Milk production in California for May 2003 totaled 3.1 billion pounds, up 0.3 percent from May 2002. USDA's estimate for U.S. milk production for May 2003 in the 20 major dairy states is 13.0 billion pounds, down 0.4 percent from May 2002. Production per cow in the 20 major states averaged 1,669 pounds for May, which is 9 pounds below May 2002.

Minimum Class Prices

Statewide average hundredweight prices

Class	June	July
1	$11.92	NA
2	$10.41	$10.41
3	$10.24	$10.24
4a	$ NA	NA
4b	$ NA	NA

Federal Order and California Minimum Class 1 Prices

Average Hundredweight Prices

Regions	June	July
Phoenix, Arizona	$12.09	$12.12
Southern California	$12.06	$12.03
Portland, Oregon	$11.64	$11.67
Northern California	$11.79	$11.76
Boston (Northeast)	**$12.99**	**$13.02**

Quota Transfer Summary

For June 2003, eleven dairy producers transferred 10,398 pounds of SNF quota. June quota sales averaged $413 per pound of SNF (without cows), an average ratio of 2.49. For July 2003, four dairy producers transferred 2,528 pounds of SNF quota. July quota sales averaged $455 per pound of SNF (without cows), an average ratio of 2.50.

Alfalfa Update: June

Northern California: Most of the month of June found Premium and Supreme alfalfa mostly steady with good demand, however supplies were light to moderate. Retail and Stable hay was steady to weak with light to moderate demand and supplies moderate to heavy. Fair and Good alfalfa was steady to weak, with light demand and heavy supplies available. Exporters not very active this month.

Southern California: June found Premium and Supreme alfalfa lightly tested with supplies light to moderate on Premium, no production of Supreme in southern desert areas. Producers are concentrating on making more retail hay now. Exporters mostly interested in Sudan hay. Most dairies seem to have adequate supply of Fair and Good alfalfa right now.

Supreme Hay Prices

Statewide average prices per ton

Area	5/30	6/6	6/13	6/20
Petaluma	$145-150	$141-152	$150-155	$150-158
North Valley[1]	$145-152	$140-152	$137-145	$140-150
South Valley[2]	$142-155	$147-154	$142-165	$142-162
Chino Valley	---------	--------	--------	--------

[1] North Valley is Escalon, Modesto and Turlock areas.
[2] South Valley is Tulare, Visalia and Hanford areas.

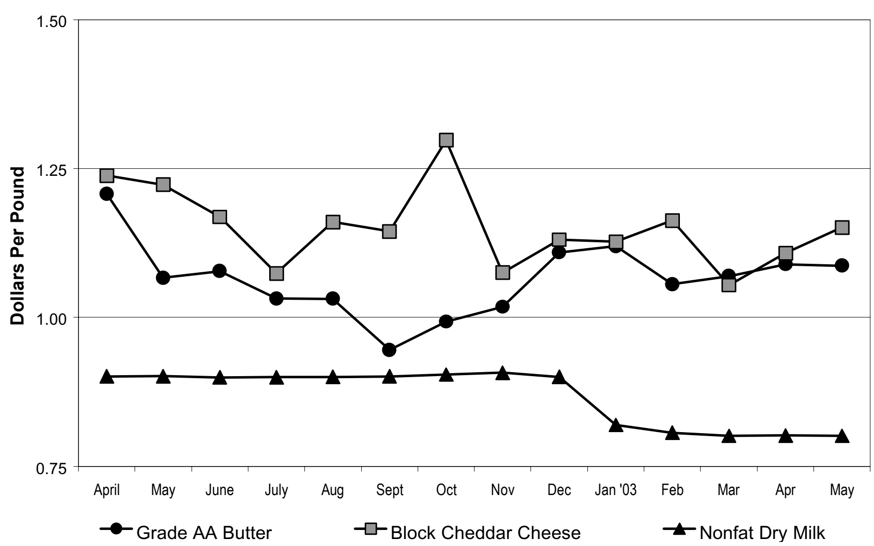
Alfalfa Hay Sales/Delivery

	May	June
Tons Sold[1]	155,633	271,591
Tons Delivered[2]	57,178	124,181

[1] For current or future delivery.
[2] Contracted or current sales.

Alfalfa hay sales, deliveries and Supreme quality prices per ton, delivered to dairies, as reported by the USDA Market News Service, Moses Lake, WA, (509) 765-3611, http://www.ams.usda.gov/marketnews.htm

Grade AA Butter, Block Cheddar Cheese, and Nonfat Dry Milk Prices Used in the Calculation of California Class 1 Milk Prices



Pricing Formulas - *Continued from Page 1*

Finally, the carrier portion of Class 1 milk, that is, the portion of milk that is not fat and is not SNF, has a value assigned to it. The price for the carrier portion is higher in Southern California than in Northern California.

Determining the minimum prices that California processors must pay for milk used to produce Class 1 products involves five basic steps:

1) Set the Class 1 fat price directly by using the Chicago Mercantile Exchange (CME) Grade AA butter price with an adjustment .

2) Calculate a basic price mover called the commodity reference price (CRP) using the **higher of** the CME price for Cheddar cheese or the CME Grade AA butter and California weighted average price for nonfat dry milk.

3) Subtract the Class 1 fat price from the CRP and allocate the remaining residual value to SNF and carrier

4) Subtract $0.0031 per pound from the Northern California carrier price.

5) Multiply the fat price by 3.5, multiply the SNF by 8.7 and multiply the carrier price by 87.8; add the three products to get a hundredweight price.

The following schematics shows how all of the elements of the pricing formula interact. As with all of the other pricing formulas, the structure and parameters of the formulas are constant from month to month until they are amended through a public hearing.

Butter price adjuster

Butter yield; can produce 1.2 lbs of butter from one pound of fat.

Price of Class 1 fat = (CME butter – $0.10) x 1.2

Market price per pound of Grade AA butter at the Chicago Mercantile Exchange.

Commodity Reference Price = the **higher of** two price calculations:

Market price per pound of 40 lb. block Cheddar cheese at the Chicago Mercantile Exchange.

Cheese yield; can produce 9.8 lbs of cheese from 100 pounds of milk.

(CME Cheddar) x 9.8

+ (CME AA butter – $0.10) x 0.27

Market price per pound of Grade AA butter at the Chicago Mercantile Exchange.

Adjustment to reflect the value of whey butter relative to CME Grade AA butter price.

Whey butter yield; can produce 0.27 lbs of whey butter from 100 pounds of milk.

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OR:

Market price per pound of butter at the Chicago Mercantile Exchange.

Butter yield; can produce 1.2 lbs of butter from 1 pound of fat.

(CME butter x 1.2) x 3.5

Fat content of whole milk.

+ (CA NFDM x 0.99) x 8.7

Weighted average of nonfat dry milk prices received by California processors.

NFDM yield; can produce 0.99 lbs of NFDM from one pound of SNF.

SNF content of whole milk.

Commodity Reference Price

Fixed differential

Percentage of fat in raw milk

Price of Class 1 SNF = (((CRP + $0.464) – (Class 1 fat price x 3.5))

Percentage of SNF in raw milk

x 0.76)/8.7

Proportion of residual value assigned to SNF

Price of Class 1 carrier = (((CRP + $0.464) – (Class 1 fat price x 3.5))

Percentage of fluid in raw milk

x 0.24)/87.8

Proportion of residual value assigned to fluid

For Northern California, subtract an additional $0.0031 from the per pound price of fluid carrier.

Just as with the other four pricing formulas, the hundredweight price is obtained easily once the fat, SNF and carrier prices have been calculated. Using a standardized milk testing 3.5% fat and 8.7% SNF, the Class 1 hundredweight price is:

= (3.5 x Class 1 fat) + (8.7 x Class 1 SNF) + (87.8 x Class 1 carrier)

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This completes our series discussing milk prices in California. For reference, the following related topics appeared in designated prior issues of the *California Dairy Review*:

Article Title	Date
How to Read a Milk Producer Statement	November 2002
Why Is Milk Regulated?	December 2002
How Classified Prices Contribute Revenues to the Pool	January 2003
The Mechanics of Pooling	February 2003
Details of the Pricing Formulas	March 2003
Revisiting the Details of the Pricing Formulas (Class 4a)	April 2003
Details of the Pricing Formulas (Class 4b)	May 2003
Details of the Pricing Formulas (Classes 2 and 3)	June 2003

Dairy Marketing Branch Unveils New & Improved Website

The Dairy Marketing Branch is pleased to announce a new and improved dairy website, launched on Thursday, June 19th, located at http://www.cdfa.ca.gov/dairy/. The website is now issue-driven, eliminating the need to know which Branch is responsible for which issues. We continue to look for ways to improve accessibility to data; so any input you have regarding the website is welcome.

Special thanks to the efforts of the website steering committee members Jim Tillison, Rachel Kaldor, Kate Sander, Steve Nash, Margo Souza, Sharon Hale and Tiffany LaMendola for all of their input on this project. Should you have any questions or problems accessing information, please contact Eric Erba or Carlos Behr at 916-341-5988.

New Feature on Dairy Marketing Branch Website

Beginning July 15, 2003, there will be a “Markets, Weather, and News” link on the Dairy Marketing Branch website where you can access the Data Transmission Network (DTN) information. You will be able to access weather, futures markets, Ag Market News, Dairy News, Hay and Feed News, Washington Ag News and Market News information by clicking the ikon on the left hand side of the home page designated as “Markets, Weather, and News” - give it a try and let us know what you think. You can e-mail us at dairy@cdfa.ca.gov or call us at (916) 341-5988 with your input.

Cooperatives Working Together

Cooperatives Working Together (CWT), is a farmer-led and farmer-funded voluntary dairy industry program, with the intent to strengthen and stabilize milk prices by balancing supply with demand. The CWT program will consist of three major elements: an export assistance program, a herd purchasing program, and a program to provide incentives for producers to reduce their milk marketings. For more information, contact CWT, 1-703-243-6111 or visit the websites: www.cwt.coop. or www.nmpf.org .

The following is a list of CWT informational meeting dates and times:

July 14, 7PM: SES Hall, 10427 E. Stockton Blvd, Elk Grove, CA 95624
July 15, 1PM: Stanislaus Co. Agricultural Center, 3800 Cornucopia Way, Modesto, CA 95358
July 15, 9:30AM: Stevenson Pentecost Hall, 2962 Northlander Ave., Stevenson, CA 95374
July 16, 1PM: UC Cooperative Extension, 2145 Wardrobe Ave., Merced, CA 95340
July 17, 10AM: Sonoma-Marin Co. Fairgrounds, BCW Hall, Petaluma, CA 94951
July 17, 1PM: Escalon Livestock Market, 25525 E. Lonetree Rd., Escalon, CA 95320
July 18, 10:30AM: Country Kitchen, 729 4th Street, Orland, CA 95963

Milk Stabilization Assessments Discontinued

The California Food and Agricultural Code authorizes the Secretary of Food and Agriculture to establish a maximum total assessment of two and four-tenths cents ($0.024) per hundredweight of market milk sold in commercial trade channels to fund the operations of the Dairy Marketing Branch. An assessment of one and five-tenths cents ($0.015) per hundred-weight, two thirds of which is assessed to producers of market milk and one-third to handlers of market milk, was implemented December 1, 2002. Due to adequate cash reserves, the Milk Stabilization assessments will be discontinued for a period of at least two months, effective August 1, 2003.

Cattle Producer Update

CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

Bovine Tuberculosis in California

On April 25, 2003, the United States Department of Agriculture (USDA) lowered California's tuberculosis (TB) status from TB "accredited-free" to TB "modified accredited advanced" because three TB-affected herds were detected within a 48-month period.

Update

Since May 2002, bovine TB has been confirmed in three California dairy herds. Two herds were located in **Tulare** county and one herd in **Kings** county. All herds were quarantined, test-positive cattle were destroyed, and the remainder of the herds depopulated**. California can reapply for accredited-free status in April 2005, provided no additional infected herds are detected.**

Investigation of a TB-infected cow found in September 2002 at a California slaughterhouse is ongoing.

USDA personnel working in California slaughterhouses detected two of the three infected herds. In 2002, 647 samples were collected from CA slaughterhouses for TB surveillance.

The USDA awards $6,000 to slaughterhouse personnel who detect a newly infected herd.

As of May 30, 2003, 324,493 cattle in 208 herds have been tested for bovine TB since this investigation began, and about 13,000 cattle have been depopulated.

Cumulative Since May 13, 2002	
Number of herds tested	208
Number of animals tested	324,493
Number of herds quarantined	3
Number of cattle destroyed	~13,000
Average number of field personnel	30

Impact on California

With the downgrade from TB-free to modified accredited advanced, all sexually intact cattle and bison leaving California require official identification and a certificate stating that they were negative to an official TB test done within 60 days prior to the date of movement unless moved:

- To slaughter at an approved slaughtering establishment;
- From an accredited herd and accompanied by a certificate stating that the accredited herd completed the testing necessary for accredited status with negative results within one year prior to the date of movement.

The new TB requirements do not apply to sexually intact heifers moving to feedlots, or steers and spayed heifers, until September 30, 2003. However, some states may have more restrictive policies for moving feeder cattle. Always check with the state of destination for their TB test requirements.

Agreements developed with neighboring states ease the TB testing requirements on breeding beef cattle moving interstate annually for grazing on an approved Pasture-to-Pasture permit. Breeding beef cattle 24 months of age and older require a TB test within 12 months of application for the permit, and subsequently every three years to continue to move annually while California is less than TB-free.

Plans and Progress

The California Department of Food and Agriculture (CDFA), USDA, and the cattle industry are working together to control and eradicate bovine TB from California. Current plans to enhance the California TB program include:

- Continue testing all 677 dairy herds in Tulare, Kings, and Fresno Counties (~773,000 milking cows), prioritizing dairies that recently received out-of-state cattle. Testing in Fresno County is nearly completed and should confirm the TB-free status of Fresno County.
- Require a TB test before importing dairy cattle into California.

CDFA Animal Health Branch Offices	
Sacramento (HQ)	916-654-1447
Modesto	209-491-9350
Ontario	909-947-4462
Redding	530-225-2140
Tulare	559-685-3500
Tulare TB Task Force	559-687-1158
CDFA Milk and Dairy Foods Control Branch Offices	
Stockton	209-466-7186
Oakland	510-622-4810
Fresno	559-445-5506
Ontario	909-923-9929
USDA/APHIS/VS	
916-857-6170 or 877-741-3690	

For more information, visit Web sites at: www.cdfa.ca.gov or www.aphis.usda.gov/vs

Attorney Suggests Expansion of Arizona-Las Vegas Milk Marketing Order to Include Southern California Counties

Ben Yale, attorney at law, suggested that some of the problems of inefficient milk movements could be addressed by redefining the boundaries of the Arizona-Las Vegas Order. In a letter to USDA, Mr. Yale, who is representing Select Milk Producers and Continental Dairy Foods, expressed his clients' concern in limiting the operating size of producer-handlers in that order, an issue that is under consideration at USDA. In the letter, Mr. Yale states that the central problem being faced by Arizona is the presence of California's state pricing and pooling system which will not be addressed by reviewing the definition of a producer-handler. Mr. Yale suggests that the expansion of the Arizona-Las Vegas marketing area will reduce the ability of producer-handlers to grow, will reduce disparities in the two pricing systems and will create more orderly marketing conditions.

Mr. Yale's remarks were submitted May 16 in response to USDA's April 14 invitation to comment on whether USDA should hold a public hearing to consider possible amendments to the Arizona-Las Vegas Marketing Order. United Dairymen of Arizona had requested that USDA hold a public hearing to consider: 1) ending the regulatory exemption for producer-handlers whose route disposition exceeds three million pounds per month; and 2) amending the producer milk definition which would require that at least five days milk production of a producer be received at a plant and exclusion of milk from the pool that is classified and priced under a state operated regulatory system; and 3) amending the pool plant definition by adjusting qualifying shipment standards for pooling. USDA is currently determining whether to hold a public hearing to consider the producer-handler amendments. Should USDA decide to hold a hearing on the producer-handler issues, they will give due notice and seek comments and participation from all interested parties. Further, if USDA decides to address the question of whether a federal milk marketing order territory should be enlarged, USDA would likely handle the issue under a separate fact-finding process including a referendum of all producers in the newly proposed area.

Department Staff Meet With Southern California Producers

Five staff members from the Dairy Marketing and Milk Pooling Branches met with Southern California dairy producers on June 10th and 11th. The meetings were a continuation of the dairy programs' producer outreach effort. At the meetings, there is no set agenda and no off-the-shelf presentation is given. In general, the participating producers determine the direction of the discussion. In the most recent producer outreach meetings, the main topics discussed were:

- The possibility of a federal milk marketing order in California,
- The outlook regarding the longevity of quota and the $1.70 differential,
- The level of California milk prices and the sustained period of low milk prices,
- Farm bill issues and potential impacts on dairy producers,
- Retail milk and dairy product prices,
- Out of state milk being shipped into California,
- Coops Working Together (CWT), a self–help program being advanced by National Milk Producers Foundation for dairymen throughout the U.S.

If you are interested in organizing a meeting with the dairy programs staff in your area, please contact the Cost of Production Unit representative in your area or contact our Sacramento office, Candace Gates, Eric Erba, Tom Gossard, or Dave Ikari at (916) 341-5988.

Federal Legislation Proposed to Close Dairy Pricing Loophole

In June a new fluid milk processing plant began operating in Yuma Arizona. Under the provisions of federal orders, the new fluid processing plant may be exempt from the federal mandate to pay the Las Vegas-Arizona Federal Milk Marketing Order minimum Class I price to producers. If the new plant does not market significant quantities of fluid products into the Las Vegas-Arizona market order area it will be exempt from paying the minimum Class I price.

Federal legislation has been proposed which would close this loophole in USDA regulations. Congressman Devin Nunes of Tulare has introduced HR 1659 in the U.S. House of Representatives, with a number of co-sponsors and significant support from many California producers and processors and the National Milk Producers Federation. HR 1659 is intended to ensure that milk processed within a federal milk marketing order area but shipped to areas outside the federal order would not be exempt from minimum farm pricing by USDA. CDFA has been working with the authors of the legislation.

National Dairy Situation and Outlook – USDA Estimates

Milk Production and Cow Numbers

Monthly: Compared to 2002, USDA estimates that overall milk production across the U.S. was down -0.4% in May, led by Texas' 5.8% growth in milk production (on 3,000 more cows and 75 more pounds per cow). California's estimated production was up 0.3% (on 54,000 more cows and 55 less pounds per cow). Among other western states, Arizona had no change; New Mexico up 5.3%; and Washington down 2.2%. Five of the top 10 states reported a decrease: New York, -1.8%; Minnesota -2.8%; Washington, -2.2%; Wisconsin -0.6%; and Pennsylvania -3.0%.

Quarterly: For the first quarter of 2003 compared to the fourth quarter of 2002, U.S. milk cow numbers were up 0.7% at 9.154 million, production per cow was up 3.2%; the net effect was a 3.1% increase in milk production to 42.9 billion pounds. USDA projects that for the second quarter of 2003 compared to the first quarter of 2003, U.S. milk cow numbers will decrease 24,000 cows to 9.130 million cows, production per cow will be up 3.4%; the net effect would be a 3.3% increase in milk production to 44.3 billion pounds.

Milk Prices

Comparing the first quarter of 2003 to the fourth quarter of 2002, U.S. average milk prices were down $0.60/cwt. to $11.37/cwt. USDA projects that for the second quarter of 2003, U.S. average milk prices will be down $0.25-0.40/cwt. compared to the first quarter; including a $0.05-0.25/cwt. Class 4b price decrease and a $0.00-0.30/cwt. Class 4a price decrease.

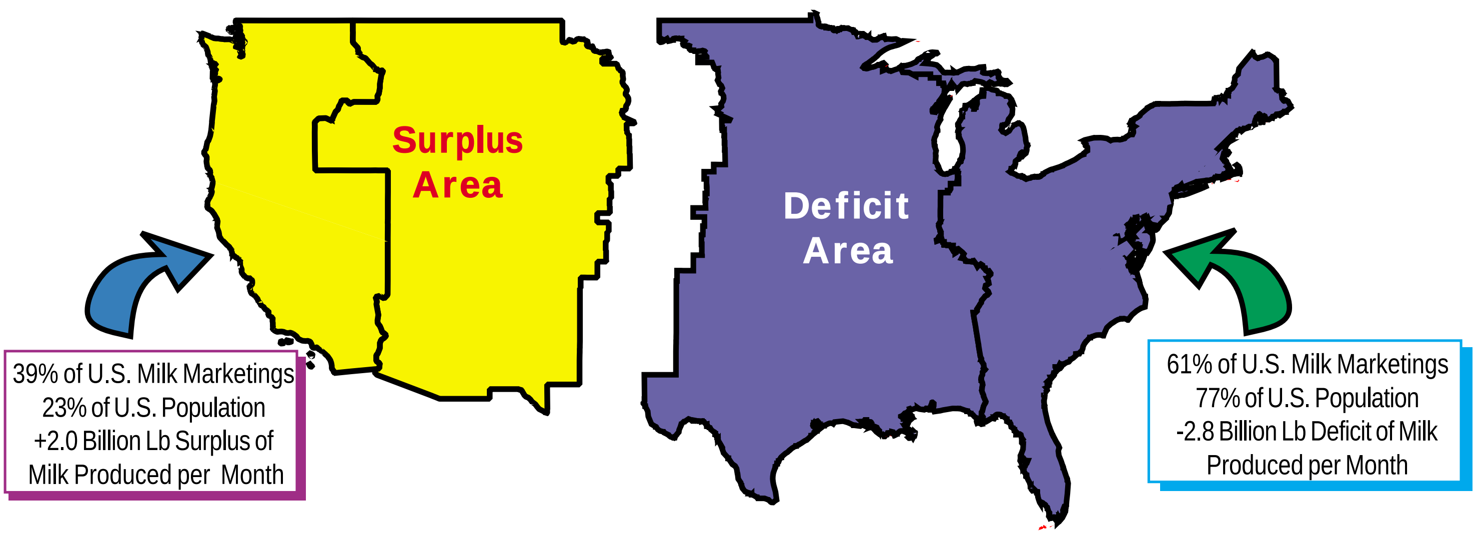
Utility Cow Prices

Comparing the first quarter of 2003 to the fourth quarter of 2002, average U.S. utility cow prices were up $4.63/cwt. to a national average of $40.32/cwt. USDA projects that utility cow prices will rise to $48-49 levels in the second quarter of 2003.

Information from the USDA-NASS publication "*Milk Production*" and the USDA-ERS publication: "*Livestock, Dairy, and Poultry Outlook.*"

Where Is the Milk . . .Where Is It Needed???

Milk Marketings vs. Population, December 2002



In this analysis, the Kansas City Market Administrator's Office assumed that on average, every person requires approximately 50 pounds of milk per month (on a milk equivalent basis) to meet total nutritional dairy requirements, representing the "demand element" for milk. Population data from 2001 was used to compare per capita milk marketings with estimated per capita milk consumption.

Surplus Area: The area west of the Rocky Mountains represents 23% of the U.S. population:

- Per capita milk marketings were 81 pounds per month, translating into a monthly **excess** of 2.0 billion pounds of milk.

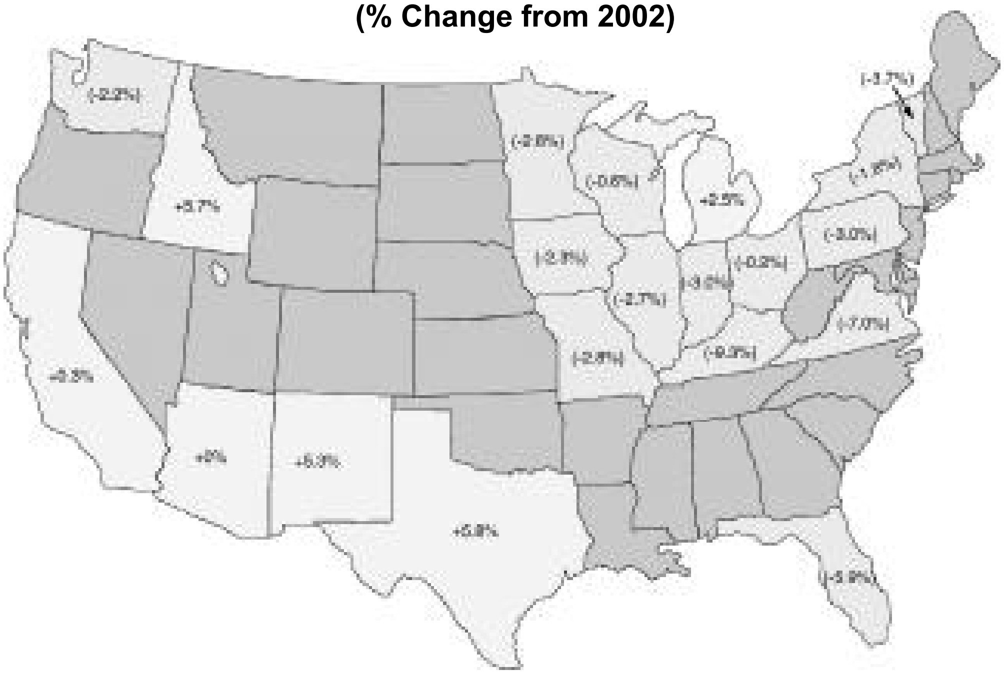
Deficit Area: The area east of the Rocky Mountains represents 77% of the U.S. population:

- Per capita milk marketings were 37 pounds per month, translating into a monthly **deficit** of 2.8 billion pounds of milk.

Sources: USDA Federal Milk Market Administrator, Kansas City April 2003 analysis; California Department of Food and Agriculture

May Milk Production in the Top 20 States

(% Change from 2002)



For the U.S. overall, comparing May 2003 to May 2002:

- Milk production during May was down 0.5%
- The number of cows on farms was 9.123 million head, down 26,000 head
- Production per cow averaged 1,650 pounds, 2 pounds mless than May 2002
- Only five of the top twenty producing states showed an increase in milk production

Milk Production Cost Index for California

Month	North Coast 1/		North Valley		South Valley		Southern California		Statewide Weighted Average	
	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003
	Dollars per Hundredweight									
January	13.86	14.71	12.97	13.00	12.90	12.68	13.10	12.95	13.0110	12.9064
February	13.86	14.71	12.97	13.00	12.90	12.68	13.10	12.95	13.0110	12.9064
March	13.91	13.98	12.50	12.52	12.49	12.19	12.98	13.12	12.6245	12.5197
April	13.91	13.98	12.50	12.52	12.49	12.19	12.98	13.12	12.6245	12.5197
May			12.50		12.94		13.05		12.8019	
June			12.50		12.94		13.05		12.8019	
July			12.59		13.57		13.42		13.1835	
August			12.59		13.57		13.42		13.1835	
September			12.89		13.39		13.70		13.2803	
October			12.89		13.39		13.70		13.2803	
November			12.99		12.78		13.26		12.9767	
December			12.99		12.78		13.26		12.9767	

Hundredweight Pool Prices

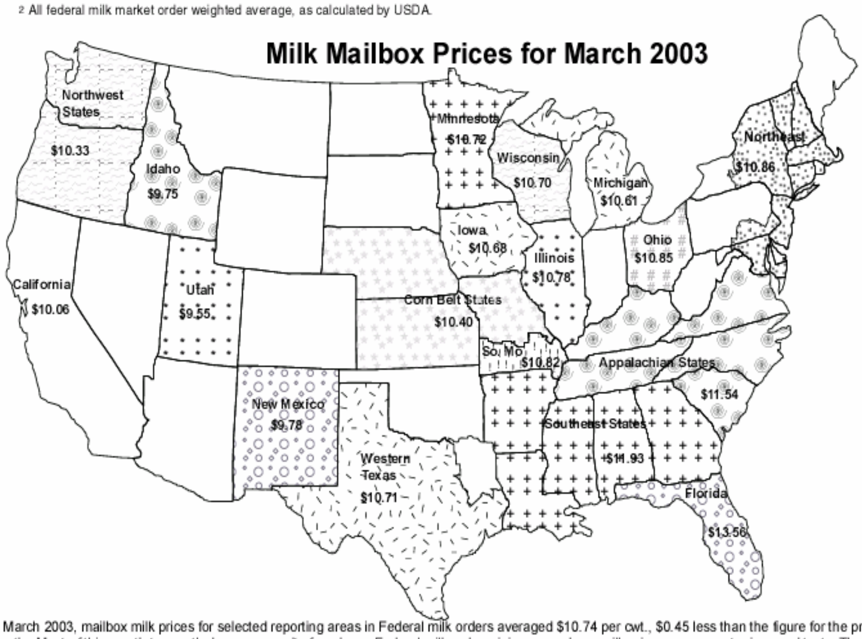
Month	Quota	Overbase
January '02	$13.18	$11.48
February	$12.53	$10.83
March	$12.37	$10.67
April	$12.41	$10.71
May	$12.06	$10.36
June	$11.60	$ 9.90
July	$11.28	$ 9.58
August	$11.48	$ 9.78
September	$11.58	$ 9.88
October	$11.84	$10.14
November	$11.44	$ 9.74
December	$11.48	$ 9.78
January '03	$11.40	$ 9.70
February	$11.11	$ 9.41
March	$10.93	$ 9.23
April	$11.02	$ 9.32
May	$11.05	$ 9.35

Milk Mailbox Prices in Dollars per Hundredweight

	September	October	November	December	January '03	February	March
California [1]	$10.58	$10.94	$10.69	$10.68	$10.64	$10.33	$10.06
USDA [2]	$11.40	$12.00	$11.75	$11.69	$11.61	$11.19	$10.74

[1] California mailbox price calculated by CDFA.

[2] All federal milk market order weighted average, as calculated by USDA.



In March 2003, mailbox milk prices for selected reporting areas in Federal milk orders averaged $10.74 per cwt., $0.45 less than the figure for the previous month. Most of this month-to-month decrease results from lower Federal milk order minimum producer milk prices component prices and tests. The current mailbox price all area average is the lowest price since this data series began in January 1995. The component tests of producer milk in March 2003 were: butterfat, 3.71%; protein, 3.02%; and other solids 5.72%. On an individual reporting area basis, mailbox prices decreased in all reporting areas, and ranged from $13.56 in Florida to $9.55 in Utah. In March 2002, the Federal milk milk order all-area average mailbox price was $12.39, $1.65 higher.

Note: Effective with the January 2003 report, the Iowa reporting area has been removed from the Corn Belt States reporting area and is reported separately. The Northern Missouri reporting area has been added to the Corn Belt States reporting areas.